Office Action dated May 10, 2007

REMARKS

STATUS OF CLAIMS

In response to the Office Action dated May 10, 2007, claims 1 and 3-8 have been amended,

and claim 2 has been canceled. Claims 1 and 3-8 are now pending in this application. No new

matter has been added.

Each of claims 1 and 3-8 have been amended to delete the colon after ") " in the claim

designation.

REJECTION OF CLAIMS UNDER 35 U.S.C. § 103

I. Claims 1-3 and 8 have been rejected under 35 U.S.C. §103(a) as being unpatentable over the

Applicants' Admitted Prior Art (AAPA Fig. 5) in view of Okuyama et al. (U.S. Patent No.

6,256,390) and Bennett (US 2002/0152341), for the reasons substantially of record.

Claim 4 has been rejected under 35 U.S.C. §103(a) as being unpatentable over AAPA

Fig. 5 in view of Okuyama et al. and Bennett, as applied to claims 1-3 and 8, and further in view of

Akune (U.S. Patent No.5,831,565), for the reasons substantially of record.

Claim 5 has been rejected under 35 U.S.C. §103(a) as being unpatentable AAPA Fig. 5 in

view of Okuyama et al., Bennett and Akune, as applied to claim 4, and further in view of Kojo et al.

(US 2004/0033057), for the reasons substantially of record.

Claim 6 has been rejected under 35 U.S.C. §103(a) as being unpatentable AAPA Fig. 5 in

view of Okuyama et al., Bennett and Akune, as applied to claim 4, and further in view of Wong et al.

(U.S Patent No. 6,446,476), for the reasons substantially of record.

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Claim 7 has been rejected under 35 U.S.C. §103(a) as being unpatentable AAPA Fig. 5 in view of Okuyama et al. and Bennett, as applied to claims 1-3 and 8, and further in view of Smith (US 2002/0000831).

II. In the section of "Response to Arguments", the Examiner indicates that he does not agree with the assertion that "Bennett fails to disclose a bus management means that manages one or more signal buses that are respectively connected externally to at least a portion of the plurality of ports".

Attention is directed to the description at paragraph [0043] of the present application which describes, *inter alia*:

[0043] ...in accordance with isochronous format(s) as defined at IEEE 1394. In accordance with such isochronous format, data is divided into appropriate width(s), data blocks produced as a result of such division are assigned to respective packets, and packets are transmitted and/or received by way of bus(es); and because packet transmission rate is set sufficiently higher than transmission rate(s) of signal(s) representing DV-format video data and/or signal(s) representing MPEG-2TS-format video data, DV-format signal(s) and MPEG-2TS-format signal(s) can be transmitted and or received more or less simultaneously through time division.

Although Bennett (FIG, 5) and Okuyama et al. (FIGS. 9 and 11) refer to signal formats, they fail to disclose a specific manner of transmission and/or receipt as described in the present invention.

Hence, to expedite prosecution, independent claim 1 has been amended to recite, inter alia:

one or more protocol conversion means for carrying out signal transmission protocol conversion at a physical-layer level on at least one of the optical signals transmitted and/or received by said at least one of the ports; and

one or more bus management means *for co-managing* one or more signal buses which are respectively connected externally to at least a portion of the plurality of ports, *wherein*

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said one or more protocol conversion means is an application-level protocol conversion means which carries out mutual conversion between two formats of signal transmission protocols at an application level, and

respective signals according to the two formats of signal transmission protocols mutually converted by the application-level protocol conversion means are assigned together to a series of packets, and the respective signals are transmitted simultaneously in said packets.

AAAPA (Fig. 5), Okuyama et al., Bennett, Akune, Kojo et al., Wong et al. and Smith do not disclose or suggest the features now recited in amended independent claim 1. Therefore, claims 1 and 3-8, as amended are patentable over these references and their allowance is respectfully solicited.

CONCLUSION

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Edward J. Wise (Reg. No. 34,523) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

Dated: August 9, 2007

Respectfully submitted,

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